

REMARKS

Claims 41-66 are presented for examination.

In the Final Rejection of October 31, 2002, claim 28 was objected to for formality; claims 30-32 and 36 were rejected under 35 USC 112, second paragraph; claims 34, 35 and 40 were rejected under 35 USC 102(b) as being anticipated by Franck et al; claim 34 was rejected as being anticipated by Yamada et al; claims 19-23, 27, 29, 31 and 37-38 were rejected under 35 USC 103 on Dreyer (U.S. Patent No. 5,692,822); claims 19, 24, 25 and 28 were rejected under 35 USC 103 as being unpatentable over Yamada et al; claim 28 was rejected as being unpatentable over Dreyer in view of Dreyer, Jr. (U.S. Patent No. 5,043,850); claims 30 and 39 were rejected under 35 USC 103 as being unpatentable over Yamada et al in view of Franck et al; claim 33 was rejected as being unpatentable over Yamada et al in view of Koike et al.

The undersigned attorney wishes to thank the Examiner for the courtesy of answering telephone inquiries on December 17, 2002 and December 20, 2002, during which questions concerning her ground rules on granting interviews were discussed. It should be pointed out that no agreements were reached.

By this amendment, finally-rejected claims 19-40 have been cancelled and a new set of claims 41-66, which have been drafted to overcome the rejection under 35 USC 112 and also to further highlight the invention over the prior art, are submitted herewith.

Applicants' invention is the fact that the parts, such as the cap reflectors, the input reflectors and light-refractive structures, such as the light permeable components, are all built as interchangeable parts, so that a particular light emission can be obtained from a light unit without making major changes in the structure of the unit. For example, if a light unit is to be a direct lighting unit, a totally reflective cap reflector can be utilized; however, if indirect lighting is desired, a partially transmissive cap reflector can be utilized. In a similar manner, substituting different light permeable components can change the light emission characteristics of the particular light without requiring changing the size and/or shape of the unit.

An advantage of the applicants' system of light units or luminaires is that each unit has a hollow light guide and by changing standardized basic parts, different optical properties can be changed without changing the size or shape of the unit. In contrast, standard light units use the reflector to determine the light distribution and require a change in the shape of the reflector to obtain a different light distribution and this usually means a change in the dimensions.

It is respectfully submitted that the independent claims, such as newly-presented claim 41, are clearly patentable over the references of record, since none of the references teach or suggest a hollow light guide with the feature of the element, which allows different light emission properties to be obtained out of a single unit by substituting one element for another. For example, Dreyer (U.S. Patent No. 5,692,822) teaches a bidirectional line light source having a thin film light conduit 14 disposed in a protective cover 12 and this element 14 is provided with longitudinally- or helically-extending prisms. However, it is submitted that there is no suggestion of changing one of the elements, such as a cap reflector or light-reflecting structure or the input reflector, so as to change the light emission properties of the unit. It is submitted that the Examiner is merely speculating when saying that this reference teaches this feature.

In a similar manner, it is submitted that Yamada et al does not teach or suggest changing parts to obtain different characteristics. It is also noted that Yamada et al is directed to a back lighting device.

The remaining references do not appear to overcome the above-mentioned defects. It is submitted that the dependent claims, such as 42-55, add additional structural features which are not taught by the references. For example, that the elements are selected from reflective cap reflectors and partially transmissive cap reflectors, such as recited in claim 43; or the cap reflectors have different reflecting properties, as recited in claim 44; that the light permeable component is selected from a plate element having different light refractive structures, as recited in claims 45-49; that the support structure includes a light permeable plate and the plate elements rest on the light permeable plate, as recited in claims 47-49; that the plate elements are held onto the light permeable plate by at least one frame element, as recited in claim 48; that at least two plate elements separated by a spacer element

rest on the light permeable plate, such as recited in claim 49. It is submitted that, contrary to the Examiner's position, Franck et al does not teach or suggest any spacer elements or a light permeable plate supporting plate elements.

It is also submitted that there is no teaching or suggestion that the element is a reflector selected from input reflectors having different reflecting properties and having dimensions so that by changing the input reflectors in the light unit changes the light emission properties, as recited in claims 51 and 52; or that one of the input reflectors completely reflects light into the hollow light guide and another input reflector allows part of the light to bypass the hollow light guide, as recited in claim 52. It is also submitted that none of the references teach or suggest that there are at least two light permeable components with the light refractive structure, said two light permeable components being arranged to create a shielding effect at least in two different directions perpendicular to each other, as recited in claim 53. While the Final Rejection held that claim 32 provided no steps, it is submitted that claim 55 does provide structure which is not shown by the prior art.

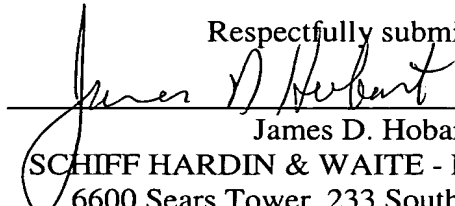
Independent claim 56 recites that the support structure has a light permeable plate, at least one of the optical components being a light permeable element having a medium with a first index of refraction and having a boundary surface with a medium of a second index of refraction different from the first, said light permeable element being received on the light permeable plate of an output device of the unit, and at least one of the optical components of each unit being a cap reflector mounted on the structure to reflect light in the light guide through the light permeable element, at least one of said components being an element that is dimensioned so that it can be used in any one of the light units of the system. It is submitted that not only do the references not teach or suggest these features, they do not teach or suggest the changeability of the specific components recited in independent claim 56 and dependent claims 57-62. It is also submitted that there is no teaching or suggestion of the different types of cap reflectors, as recited in claim 57; or that the light permeable element is a plate element which is secured to the light permeable plate of the support structure, as recited in claim 58; that the light permeable elements are plate elements positioned on the light permeable plate with a spacer element disposed therebetween adjacent the plate elements and secured to the light permeable plate, as recited in claim 59; that the system has at least two light permeable elements, said two light

permeable elements being plate elements with a light refractive structure, said two plate elements being arranged in a stack on the light permeable plate to create a shielding effect in two directions perpendicular to each other, as recited in claim 60. For these reasons, it is respectfully submitted that claims 56-62 are clearly patentable over the references of record and are allowable.

Independent claim 63 is directed to a method of making a unit, such as recited in claim 41, and includes the steps of providing a prefabricated component, providing a light permeable carrier plate, arranging the prefabricated component on the carrier plate to fill a predetermined area of the carrier plate and then fastening the component and plate to limit the cavity of the hollow light guide. Similar claims were rejected on Franck et al; however, it is submitted that there is no teaching or suggestion in Franck et al that the component is arranged on a carrier plate. It is submitted that independent claim 63 along with dependent claims 64-66 are patentable over the prior art of record. It is also noted that dependent claim 66 calls for positioning at least two light permeable components with a region therebetween and positioning a spacer element in the region.

In an Information Disclosure Statement filed on October 9, 2001, it was pointed out that Peter Prodell, who is one of the joint inventors of the present application, is the sole applicant of U.S. Serial No. 09/803,480, which is pending in Group Art Unit 2857 and being examined by Examiner B. Truong. In a recent filing in that application, applicants submitted a copy of EP 0 846 915 with a translation. Attached herewith is a Form PTO-1449 listing this reference and a copy of the reference and the translation is attached for the Examiner's review. It is submitted that this reference does not teach or suggest the lighting unit recited in applicants' claims. Therefore, the claims are patentable over the attached European Reference.

Respectfully submitted,



James D. Hobart (Reg. No. 24,149)
SCHIFF HARDIN & WAITE - Patent Department
6600 Sears Tower, 233 South Wacker Drive
Chicago, Illinois 60606
Telephone: (312) 258-5781
Customer Number: 26574

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